



Vermont State Airport System Plan | Vermont Aviation Advisory Council

October, 22, 2018



Developed By
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■ Completed Efforts

- Data Collection + Data Update
- Facility and Service Objectives
- Current System Performance
- Forecast

■ Current Efforts

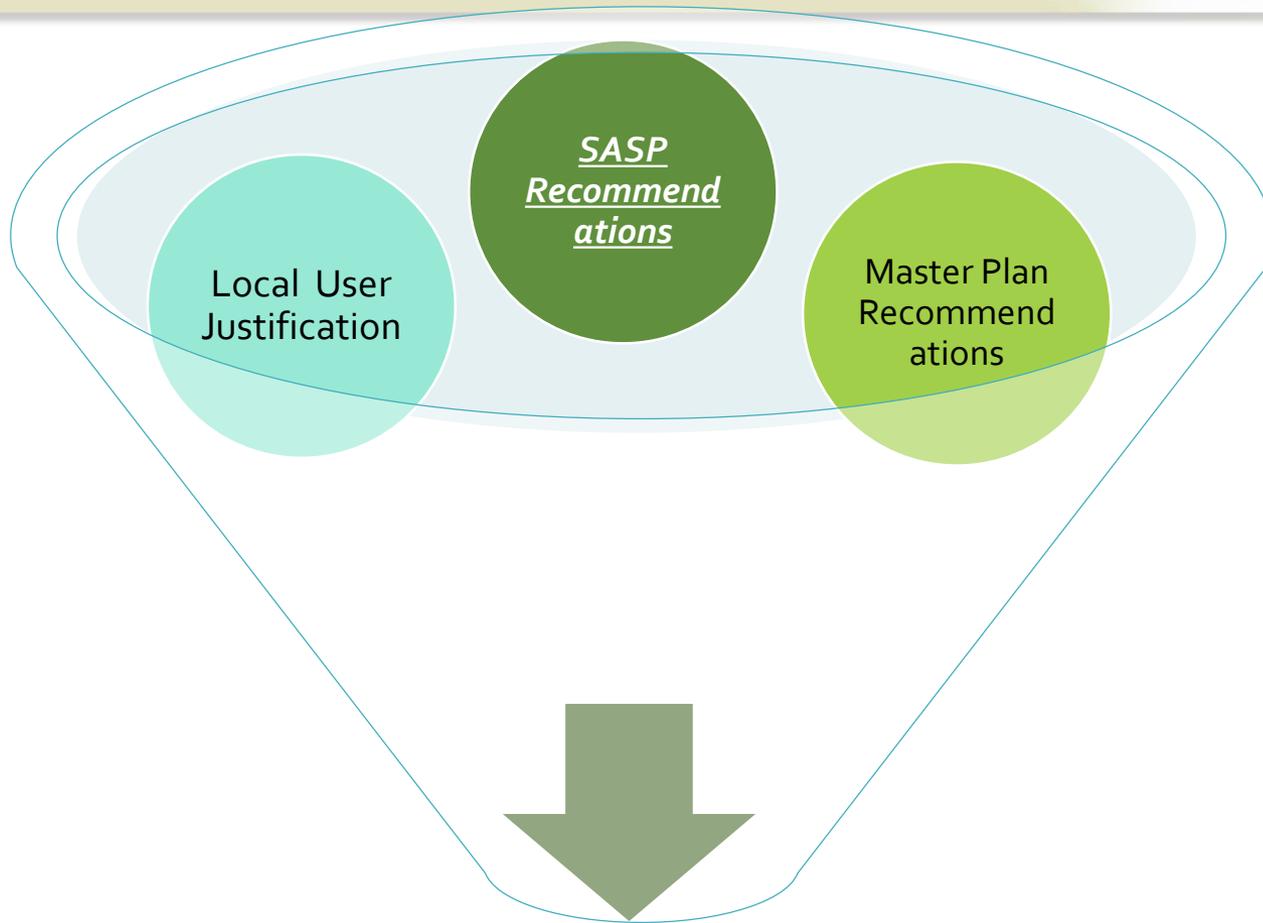
- Future System Performance
- Economic Impact
- Policy Guidance and Recommendations

Airport



<i>Airport</i>	Score	SASP Category
John H. Boylan State	7	1
Basin Harbor	9	1
Post Mills	12	1
Deerfield Valley Regional	15	1
Warren-Sugarbush	31	2
Middlebury State	36	2
Shelburne	36	2
William H. Morse State	45	3
Caledonia County State	47	3
Franklin County State	54	3
Morrisville-Stowe State	55	3
Edward F. Knapp State	85	3
Hartness State	88	3
Northeast Kingdom International	90	3
Rutland – Southern Vermont Regional	98	4
Burlington International	100	4

System Plan Role



Prioritized Investment & Development Process

Forecasts of Aviation Demand



Airport Past/Future Performance



■ Airport Performance Metrics

- Population; Based Aircraft; Fuel Sales (100LL and Jet A)

■ Vermont State Performance vs. National Trends

- Fuel Sales; Based Aircraft; Hours Flown Benchmark

■ High Growth

- Franklin County (FSO), Northeast Kingdom Int'l (EFK), Burlington Int'l (BTV), Morrisville-Stowe (MVL), and Middlebury (6B0)

■ Baseline Growth

- Hartness (VSF), Shelburne (VT8), John Boylan (5B1), Post Mills (2B9), Deerfield Valley (4V8)

■ Lower Growth

- Caledonia (CDA), Rutland (RUT), William H. Morse (DDH), Basin Harbor (B06), Warren-Sugarbush (0B7)

■ Historic Trends

- (-1.33%) - 12 year Trend (2005: 581 -> 2017: 448)
- (-1.7%) - Nationwide 2010-2016 Piston (Single/Multi)

■ Future Projections

- (-0.8%) Average Annual Growth in Piston
- 1.9% Average Annual Growth in Turbine/Jet

■ Notable Disproportionate Aircraft Type Breakdown

- 33/501 (6.5%) are Jet or Multi, Remainder Single/Glider/Ultralight

Fuel Sales Trends (Operations)



■ Jet-A

- 1.43% Statewide 2013-2016 (GA VTrans Airports Only)
- -3.9% Statewide 2006-2016
- Top Performers: FSO, EFK, MVL
- Greatest Declines: DDH, VSF, BTV (Airline Related)

■ Avgas

- 0.64% Statewide 2013-2016 (GA VTrans Airports Only)
- -3.24% Statewide 2006-2016
- Top Performers: VSF, MVL, EFK, BTV, MPV, FSO
- Greatest Declines: CDA, RUT

VT vs. FAA National Forecast



Historic	Vermont	FAA Aerospace
100LL	0.025%	-1.00%
Jet A	-0.01%	0.40%
Based AC	-1.33%	-1.70%

(pistons)

Projected	Vermont	FAA Aerospace
100LL	0.038%	-0.40%
Jet A	0.048%	1.90%
Based AC	-0.626%	-0.80%

(pistons)

VT Aircraft Mix
Consistent with VT
Performance vs.
National Trends
(Higher Piston/100LL)

■ FAA Aerospace Forecast

- Hours Flown: Piston -0.60%, Turbine 2.4%
- GA Aircraft: Piston -0.80%; Turbine 1.9%

Industry Trends
Favor Jet and
Turbine Growth

Proposed SASP Growth Rates



Operations

Base	0.42%
High	0.84%
Low	0.21%

Flying Clubs and Fractional Ownership in GA Aircraft Will Allow Operations to Increase While Based Aircraft Decrease

Based Aircraft

Base	-0.62%
High	0.79%
Low	-1.24%

Decline Represents Retirement or Elimination of Older, Typically Less-Active Aircraft

Economic Impact *Study*



Economic Impact - Model



- **Input-Output Model (IMPLAN)**
 - Data Inputs
 - Burlington International – Complete
 - Awaiting Data from Remaining SASP Airports
- **On-Airport Jobs**
 - Full Time & Part Time
 - Sponsor Employment
 - Tenant Employment
 - Military
- **Average Annual On-Airport Capital Spending**
- **Annual Visitor Spending related to Airport use**

Economic Impact - Snapshot



- **Burlington International Airport Results**
- **Remaining SASP Airports Q4 2018**

Direct & Induced Economic Impacts Item	Amount
Direct Impacts	
Airport-related Income	\$106,404,509
On-Airport Expenditures (Total including capital costs)	\$289,513,653
Estimated State/Local Taxes	\$34,527,470
Airport-related Employment (Total)	3,457 Jobs
Induced Impacts	
Induced Direct Impacts	\$191,951,228
Total Induced Employment Impacts	1,461 Jobs
Grand Total Dollar Impacts	\$481,464,881
Grand Total Income Impacts	\$170,427,061
Grand Total Employment Impacts	4,935 Jobs

Next Steps



Future System Performance



- **Existing System Performance Review**
 - Are there Benefits to Upgrading any Airport Roles?
 - Enhancing Capacity
 - Enhancing Access to Employment Centers & Underserved Geographic Areas
- **Meet Facility & Service Objective Minimums**
 - Shortfalls by SASP Role provide guidance to VTRANS for areas of focus at SASP airports for programming and funding priority
- **Activity Demand & Forecast Implications**
 - Informed by High Growth Airports
- **Air Access Coverage & Neighboring States' Airport Coverage**
 - Runway Length & Approach Capability
 - Fuel Services & Weather Systems

2018 Policy Draft Themes



- Preserving Vulnerable Infrastructure
- Economic Development
- Financial Sustainability
- Project/Investment Prioritization
- Embracing Technological Developments
- Aviation Connectivity with Other Modes

Next Steps



- **Future System Performance** **November/December**

- **Economic Benefits Assessment** **November/December**

- **Recommendations and Policy** **Winter 2019**

- **Project Completion** **Spring 2019**

- **Public/User Engagement Opportunities:**
 - VAAC Briefings (Quarterly)
 - FBO Public Meetings
 - E-mail/Written Comments (RLucas@MJinc.com)
 - Summary Public Meetings (TBD)

VTrans Staff

- Daniel Delabruere- Rail & Aviation Bureau Director
- Paul Libby- Senior Project Manager
- Costa Pappis– Policy & Planning Manager

Consultant Team

- Rick Lucas – Project Manager
- Scott LeCount - Lead Planner
- Subconsultants
 - Randal Wiedemann - Economic Impact Study
 - Michael Webber (Webber Air Cargo) – Air Cargo Analysis

Questions?



Project Contacts

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